UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte HIROYUKI SEKITANI

Appeal 2006-3294
Application 09/880,036
Technology Center 3600

Decided: November 30, 2007

Before HUBERT C. LORIN, ANTON W. FETTING, and DAVID B. WALKER, *Administrative Patent Judges.*

FETTING, *Administrative Patent Judge.*

DECISION ON APPEAL

1

2 STATEMENT OF CASE

3 Hiroyuki Sekitani (Appellant) seeks review under 35 U.S.C. § 134 of a Final 4rejection of claims 1-3, the only claims pending in the application on appeal.

5 We have jurisdiction over the appeal pursuant to 35 U.S.C. § 6(b) (2002).

6

We REVERSE and ENTER A NEW GROUND OF REJECTION UNDER 37 C.F.R. § 41.50(b).

The Appellant invented a part retrieving system for production machines utilizing a network, the system allowing a user to easily obtain part identifying information such as part numbers when, for example, replacing defective or consumed parts with new ones for production machines such as punch presses or lathes (Specification 1:First ¶)).

An understanding of the invention can be derived from a reading of exemplary claim 1, which is reproduced in the Analysis section below.

This appeal arises from the Examiner's Final Rejection, mailed September 15, 2005. The Appellant filed an Appeal Brief in support of the appeal on March 3, 2006. An Examiner's Answer to the Appeal Brief was mailed on May 1, 2006. A Reply Brief was filed on May 24, 2006. The Appellant presented oral arguments at a hearing on November 15, 2007.

PRIOR ART

The Examiner relies upon the following prior art:

Calloway	5,146,404	Sep. 8, 1992

We also discuss the following prior art:

Shiiba	6,629,008 B2	Sep. 30, 2003

Alex Berson, Client/Server Architecture, 1992, pp. 48-49

REJECTION

Claims 1-3 stand rejected under 35 U.S.C. § 102(b) as anticipated by Calloway.

ISSUES

The issue pertinent to this appeal is

- Whether the Appellants have sustained their burden of showing that the Examiner erred in rejecting claims 1-3 under 35 U.S.C. § 102(b) as anticipated by Calloway.

The pertinent issue turns on whether Calloway's terminal transmits part information to a database bidirectionally with a network.

FACTS PERTINENT TO THE ISSUES

The following enumerated Findings of Fact (FF) are believed to be supported by a preponderance of the evidence.

Calloway

1. Calloway is directed to an electronic maintenance support (EMS) work station with one screen for displaying text information related to, and another screen for displaying graphic illustrations of, various assemblies, subassemblies and parts of a product serviced by the station. The EMS work station stores text files containing static data associated with a product assembly, subassembly or part at a particular level of a hierarchical organization of the product structure. Each text file is linked with a corresponding graphic. User selections are made relative to the

text screen or the graphic screen. The work station detects calls for text or graphics and retrieves and displays the called text files or graphics and its linked counterpart. The work station display sequences through the product hierarchy as part selections are made from the graphic screen, enabling the product structure to be searched for an assembly, subassembly or part needed for maintenance purposes. The work station identifies a text field item selection and graphically indicates on the graphic screen the assembly, subassembly or part corresponding to the identified text field item (Calloway 2:7-38).

2. As shown in FIG. 1B, the work station operation is controlled by one or more digital computers 24. The computer 24 is programmed to perform various functions shown in FIG. 1 and to interface with other hardware in controlling the operation of the EMS work station. The computer 24 accordingly interfaces with operator controls including an alphanumeric input device such as a keyboard 20 or a bar code reader (not shown), the graphics screen 14 through video/graphics hardware 22, the text screen through the video display interface hardware 22 which in some cases may be conventional or in other cases may be modified as indicated in the patent application identified below, a central computer 26 (FIG. 1A) for communications, order entry, and the order entry functions described below, and input selector devices such as interfacing employed for screen pad selectors, interfacing for a mouse selector, etc. according to

the particular selector scheme employed in the work station (Calloway 3:49-67).

3. If direct entry is chosen as indicated by block 52, the keyboard 20 (FIG. 1A) is used to enter the supplier's part number or customer's stock number as indicated by blocks 54 and 56. A routine in the graphics/keyboard monitor program 32 (FIG. 1A) then searches the part files 37 for the entered part number as indicated by block 58. If a customer stock number has been entered, cross indexing is first used to identify the part number (Calloway 4:42-49).

4. Once the part record is found for the entered part number, i.e., file, a frame number for a corresponding graphic is obtained from the part record and the part record data is displayed on the text screen 12 and the graphic is displayed on the graphics screen 14. The video disk drive and control 16 (FIG. 1A) is operated to find the identified disk frame on the laser video disk 15 and retrieve the graphic for display on the graphics screen 14 through the interface hardware 22 and graphics display 23. Part record data is displayed on the text screen 12 through display text block 33 (Calloway 4:50-60).

5. When a standard search has been selected by the user as indicated by block 64 in FIG. 2A, the system generally operates under user control to scroll through the hierarchical data structure for the various assemblies, subassemblies and parts until the number for the needed part(s) is identified by the user. Generally, scrolling through the hierarchical data

results in assembly explosion or breakdown as the search is narrowed to the particular subassembly or part that is needed (Calloway 4:66-5:6).

6. Hierarchical branching is achieved by pointing at the graphic screen 14 with the select device 30 to select an area of a displayed graphic to be enlarged, i.e., exploded as successively indicated in FIGS. 3D to 3F, through call-up of the next lower level graphic for that area. Operation of the select device 30 results in generation of an interrupt as indicated by block 66 and the monitor program 32 (FIG. 1A), including its graphics screen sequence 70, is executed in response to this input (Calloway 5:7-15).

7. If the text screen 12 is activated by the selector 39, an interrupt is generated and a text screen sequence 68 of programmed steps is executed to highlight the activated text and to identify the highlighted text item on the graphics screen 14 (Calloway 5:16-20).

8. As shown in corresponding parts of the functional block diagram of FIG. 1A, a text screen line detector 40 responds to the line selector signals to call for line highlighting by block 41 and for graphics targeting through target program 42. The text files 18 are checked by the target program 42 to identify the target coordinates in box 43. An overlay is defined by the coordinates to enclose and thereby identify the selected item on the graphics screen 14. Video interface hardware 22 and a conventional overlay display software package 25 operate to produce the target

indicator at the defined location on the graphics screen 14 (Calloway 5:30-46).

9. Generally, enough coordinate points are identified to enable an identifier or overlay, and preferably an identifier overlay enclosure line, to be displayed around the item on the graphic display. In this case, two coordinate points are stored in the text file 18 for each line item, and for each unit of the line item in the graphic, in correspondence to the location(s) of the item in the graphic. The two points define opposite corners of a rectangle so that a rectangular overlay enclosure is specified in size and location to form a target enclosure about the text screen selected item on the graphics screen 14 (Calloway 5:47-58).

10. Once the item selected on the text screen 12 has been identified on the graphics screen 14, block 82 generates a wait for the next user input from the text screen 12 or graphics screen 14. At this point, the search can be continued or the assembly job aids subsystem 30 (FIG. 1A) or other subsystems can be called into operation as indicated by flow chart block 84. One of the pad selectors 34 appears on the text screen 12 when a job aids selection is made available (Calloway 5:59-6:2).

PRINCIPLES OF LAW

Claim Construction

During examination of a patent application, pending claims are given their broadest reasonable construction consistent with the specification. *In*

re Prater , 415 F.2d 1393, 1404-05 (CCPA 1969); *In re Am. Acad. of Sci. Tech Ctr.*, 367 F.3d 1359, 1364, (Fed. Cir. 2004).

Limitations appearing in the specification but not recited in the claim are not read into the claim. *E-Pass Techs., Inc. v. 3Com Corp.*, 343 F.3d 1364, 1369 (Fed. Cir. 2003) (claims must be interpreted "in view of the specification" without importing limitations from the specification into the claims unnecessarily)

Although a patent applicant is entitled to be his or her own lexicographer of patent claim terms, in *ex parte* prosecution it must be within limits. *In re Corr*, 347 F.2d 578, 580 (CCPA 1965). The applicant must do so by placing such definitions in the Specification with sufficient clarity to provide a person of ordinary skill in the art with clear and precise notice of the meaning that is to be construed. *See also In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994) (although an inventor is free to define the specific terms used to describe the invention, this must be done with reasonable clarity, deliberateness, and precision; where an inventor chooses to give terms uncommon meanings, the inventor must set out any uncommon definition in some manner within the patent disclosure so as to give one of ordinary skill in the art notice of the change).

Anticipation

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987). "When a claim covers several structures or compositions, either generically or as alternatives, the claim is deemed anticipated if any of the structures or

compositions within the scope of the claim is known in the prior art." *Brown v. 3M*, 265 F.3d 1349, 1351 (Fed. Cir. 2001). "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236 (Fed. Cir. 1989). The elements must be arranged as required by the claim, but this is not an *ipsissimis verbis* test, i.e., identity of terminology is not required. *In re Bond*, 910 F.2d 831, 832 (Fed. Cir. 1990).

ANALYSIS

Claims 1-3 rejected under 35 U.S.C. § 102(b) as anticipated by Calloway.

The Appellant argue these claims as a group.

Accordingly, we select claim 1 as representative of the group. 37 C.F.R. § 41.37(c(1)(vii) (2006).

The Examiner found that Calloway anticipates claim 1, which is reproduced below [bracketed matter and some paragraphing added] as follows:

> 1. A part retrieving system for production machines utilizing a network, the system being characterized in that the system comprises:
>
> [1] a part database (Calloway, Fig. 1A:37) and
>
> [2] a terminal (Calloway, Fig. 1B)
>
> connected to the part database via a communication network for bidirectional communications with the part database (Calloway, Fig. 1B),
>
> said part database has information on parts accumulated therein (Calloway, Fig. 2B),
>
> the parts constituting each of production machines having different specifications (Calloway, Fig. 3A), and

said terminal comprises:

[a] part information requesting means for requesting said part database to transmit the part information (Calloway, Fig. 2A),

[b] storage means for storing the part information transmitted in response to said transmission request (Calloway, Fig. 1B),

[c] retrieval means for retrieving parts from the stored part information depending on retrieval conditions (Calloway, Fig. 2A), and

[d] ordering means for creating order information depending on the result of the retrieval by said retrieval means (Calloway, Fig. 2C).

Answer 3-4.

The Appellant contends that Calloway does not disclose "a terminal connected to the part database via a connection network for bidirectional communication with the part database," as required by claim 1 (Appeal Br. 9:Second full ¶). Based on the disclosure of Calloway, the Appellant argues that the elements within Fig. 1B's dotted line (text screen 12, video/graphics screen 14, video/graphics interface hardware 22, audio, local database, work station computer 24, video disk 15 and modem) are hardware components of the EMS workstation 10. Work station computer 24 "interfaces with" the text screen 12, video/graphics screen 14, and video display interface hardware 22 (Appeal Br. 7:Bottom ¶ - 8:Top ¶).

The Examiner found that in reference to Fig. 1B of Calloway, the Local Database is clearly detached from the workstation computer. Since the database is detached the Examiner found that a connection such as a hard wire is required to

connect the two devices. The Examiner found that a network is defined as a group of computers and associated devices that are connected by communications facilities. The Examiner further found that there are at least two computers in Calloway and the database is a device connected over the network that is the database, work station and central computer (Answer 5:¶ numbered 3).

The Appellant argues that the elements within the dotted line in Figure 1B are hardware components of the EMS workstation 10, connected by a bus. The Appellant contends that, while these components may or may not be connected using hardwires, such a connection would not be a network. The Appellant argues that the components within the dotted line of Calloway, Fig. 1B are simply peripherals which one having ordinary skill in the art would understand as being connected by a bus, not a network. Taking the definition proffered by the Examiner, that a network is "a group of computers and associated devices that are connected by communications facilities," the Appellant contends that in Calloway Fig. 1B, the components of an EMS workstation (contained within the dotted line), are linked via a bus, not a network (Reply Br. 3-4).

We find that all of the claim 1 limitations other than that of the terminal being connected to the database by a bidirectional network are met by Calloway as found by the Examiner (FF -). This finding is uncontested by the Appellant.

We find that the Appellant is correct that the database in Calloway's Fig. 1B is a component of the EMS work station. For example, the components also include a keyboard and display (FF). Such components would indeed by connected by a bus. Therefore, we find that the database shown in Calloway, Fig. 1B, is on a

memory that is similarly connected by a bus to the CPU within the work station. Thus, the database is not connected by a bidirectional network to Halloway's work station computer, which is where part information is entered, as required by claim 1.

The Appellant has sustained its burden of showing that the Examiner erred in rejecting claims 1-3 under 35 U.S.C. § 102(b) as anticipated by Calloway.

NEW GROUND OF REJECTION

The following new ground of rejection is entered pursuant to 37 C.F.R. § 41.50(b). Claims 1-3 are rejected under 35 U.S.C. § 103(a) as unpatentable over Calloway, Shiiba and Berson.

We find the following additional facts (FF) related to Shiiba and Berson.

Shiiba

11. Shiiba is directed to a production control system capable of preventing the stock of products from increasing or lacking when actual sales results are against demand by producing products with the specifications required by the client met in the ordered number, directly reflecting information of customers' orders on production, and sharing necessary information among a customer, a factory and a parts manufacturer (Shiiba 2:33-44).

12. Shiiba's host computer installed in the factory supervises the order menu production control. The host computer includes a Web server for communication between the customer outside the factory and the factory

through Internet, and also includes a data base server for various kinds of master data and an application server for various kinds of application programs for collective management (Shiiba 5:48-53).

Berson

13. Berson is a general treatise on client/server architecture and the reasons for choosing such architecture. Berson provides several reasons that one of ordinary skill would employ a database server, such as to share the computer workload and data among multiple computers and improve data integrity (Berson 48-49). Since servers respond to requests for service, the servers are connected by bidirectional network paths.

ADDITIONAL PRINCIPLES OF LAW

Obviousness

A claimed invention is unpatentable if the differences between it and the prior art are "such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art." 35 U.S.C. § 103(a) (2000); *KSR Int'l v. Teleflex Inc.*, 127 S.Ct. 1727, 1734 (2007); *Graham v. John Deere Co.*, 383 U.S. 1, 13-14 (1966).

In *Graham*, the Court held that that the obviousness analysis is bottomed on several basic factual inquiries: "[(1)] the scope and content of the prior art are to be determined; [(2)] differences between the prior art and the claims at issue are to be ascertained; and [(3)] the level of ordinary skill in the pertinent art resolved." 383 U.S. at 17. *See also KSR Int'l v. Teleflex Inc.*, 127 S.Ct. at 1734. "The

combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results." *KSR*, at 1739.

"When a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or in a different one. If a person of ordinary skill in the art can implement a predictable variation, § 103 likely bars its patentability." *Id.* at 1740.

"For the same reason, if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill." *Id.*

"Under the correct analysis, any need or problem known in the field of endeavor at the time of invention and addressed by the patent can provide a reason for combining the elements in the manner claimed." *Id.* at 1742.

ADDITIONAL ANALYSIS

The only issue under contention as to whether Calloway alone anticipates claims 1 – 3 is whether Calloway's terminal communicates bidirectionally with its database. We found, *supra*, that it does not. However the use of a database server controlled by a separate computer, bidirectionally communicating with the application process, to administer a database as in Calloway is notoriously well known. As an example, Shiiba uses a database server for various kinds of master data access (FF) in a manufacturing environment analogous to that of Calloway (FF). Berson is a treatise on servers, such as database servers, and describes

considerations that would lead one of ordinary skill to use a database server such as in the manufacturing environments of both Shiiba and Calloway. Such considerations were to share the computer workload and data among multiple computers and improve data integrity, both of which would be important to maintaining data integrity and availability in the manufacturing environments of both Shiiba and Calloway. Since servers respond to requests for service, the servers are connected by bidirectional network paths (FF).

Thus, it would have been obvious to a person of ordinary skill in the art to have attached Calloway's database to Calloway's workstation by using a database server as in Shiiba for the purposes related by Berson of maintaining data integrity and availability. Since none of the Examiner's findings regarding claims 2 and 3 are contested, we adopt the Examiner's findings in support of the rejection of those claims.

CONCLUSIONS OF LAW

The Appellant has sustained its burden of showing that the Examiner erred in rejecting claims 1-3 under 35 U.S.C. § 102(b) as anticipated by the prior art.

We enter a new ground of rejection pursuant to 37 C.F.R. § 41.50(b) of claims 1-3 under 35 U.S.C. § 103(a) as being unpatentable over Calloway, Shiiba and Berson.

DECISION

To summarize, our decision is as follows:

- The rejection of claims 1-3 under 35 U.S.C. § 102(b) as anticipated by Calloway is not sustained.
- The following new ground of rejection is entered pursuant to 37 C.F.R. § 41.50(b).
    - Claims 1-3 are rejected under 35 U.S.C. § 103(a) as unpatentable over Calloway, Shiiba and Berson.

CONCLUSION

This decision contains new grounds of rejection pursuant to 37 CFR § 41.50(b). 37 CFR § 41.50(b) provides "[a] new ground of rejection pursuant to this paragraph shall not be considered final for judicial review."

37 CFR § 41.50 (b) also provides that the appellant, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of the appeal as to the rejected claims:

> (1) Reopen prosecution. Submit an appropriate amendment of the claims so rejected or new evidence relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the proceeding will be remanded to the examiner . . . .
>
> (2) Request rehearing. Request that the proceeding be reheard under § 41.52 by the Board upon the same record . . . .

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

REVERSED
37 C.F.R, § 41.50(b)

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